

TRANSLUCENT, FLAME RESISTANT COMPOSITE MATERIALS

Abstract

A translucent composite material that can be used in various airplane interior applications that allows sufficient light transmissivity while preferably meeting Federal Aviation Administration (FAA) flammability requirements for overhead materials in the cabin of a commercial aircraft. The material also meets FAA standards regarding vertical burn, smoke emissions tests, and toxic fume emissions tests. The composite material is formed by laminating long glass fibers and (PPSU) into a composite sheet under controlled heat and pressure. The composite sheet is then cut, bent or thermoformed to form the desired part. The parts formed are available for a wide variety of uses within the passenger cabin of a commercial aircraft. The long glass fibers may be unidirectional or weaved into a glass cloth like material. While preferably formed for airplane interior applications, these components may also be used in other aerospace or non-aerospace applications.